

JAN 10 2007

Serial No.: 10/079,027

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Art Unit: 3673

Conf. No.: 6406

Reply to August 11, 2006 Action

REMARKS/ARGUMENTS

This Amendment is in response to the Office Action mailed August 11, 2006 in the above-identified application. Based on the foregoing amendments and the following remarks, careful reconsideration and allowance of the application are respectfully requested.

Claims 1-7, 9-34, and 36-38 are pending in this application. By this Amendment, claims 1, 14, 27, 32, and 33 has been amended in order to more particularly point out the invention. These amendments can be readily supported by at least Applicant's abstract, FIG. 2, para. 0027, and para. 0029 of U.S. Patent App. Pub. No. 2002/0113375. Claim 8 has been cancelled without prejudice and claim 35 has been withdrawn.

Claim Rejections

The Examiner rejected claims 27-32 and 37 under 35 USC § 112 as indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 27 has been amended to overcome the rejection.

The Examiner rejected claims 1-34 and 36-38 under 35 USC § 102(b) as being anticipated by Hubler (US 3,666,276). Applicants respectfully traverse this rejection.

Examiner states that Hubler discloses "a sealing device comprising a shaft seal (5a) having a sealing portion and a support portion (FIG. 2). The sealing portion is constructed and arranged to sealingly engage with a shaft to be at least one of slidingly and rotationally moved relative to the sealing portion (FIG. 2). There is a seal mount (22) having a first end (12), a second end (13) and a flexible member (6a) between the first (12) and second ends (13) that enable movement of the first end relative to the second end in at least one degree of freedom (via flexible connection bellow portion). The first end (12) is sealingly engageable to at least a portion of the support portion (3a) of the shaft seal (5a). The second end (13) is sealingly engageable to an engagement surface (surface of 2a) about a port into a process chamber (FIG. 2)" (Page 3 of Office Action mailed August 11, 2006).

Claim 1 requires "the sealing portion being disposed on the shaft to maintain a vacuum seal about the shaft." Claim 27 requires "the sealing member being disposed on the shaft to maintain a vacuum seal about the shaft." Claim 33 requires "at least one of the seal members being disposed on the shaft to maintain a vacuum seal about the shaft."

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Applicant respectfully submits that Hubler does not disclose, teach, or suggest a sealing portion or sealing member "disposed on the shaft to maintain a vacuum seal about the shaft." In Hubler, "[t]he outer diameter of this lined or coated sleeve is such that a well-defined reduced clearance exists between the sleeve and the inner wall of socket 3a" (col. 3, lines 46-49). "This casing encloses a neutral fluid adapted to leak to the outside in order to constitute a protective barrier" (col. 3, lines 36-38, emphasis added). "In fact, when the rotary shaft 1a revolves at its rated speed, a fluid bearing builds up therearound which prevents any direct contact between the outer socket 3a and the sleeve 4a fitted to this shaft" (col. 4, lines 46-51). Hubler will, thus, afford "a moderate leakage" and "limited fluid flow between said casing and the surrounding atmosphere" (Hubler abstract) while Applicant's device will maintain "a vacuum seal about a mechanism that passes through a port of a process chamber" (U.S. Patent App. Pub. No. 2002/0113375 abstract). Applicant's claims 1, 27, and 33 each require the sealing portion or sealing member be "disposed on the shaft to maintain a vacuum seal about the shaft." Hubler instead has "leakage" (Hubler abstract) and does not provide a vacuum seal between the shaft and the sealing portion or sealing member.

Hubler indicates that fluid tightness of the assembly may be tested by creating a vacuum in chamber P1 (col. 4, lines 39-41). However, at least because Hubler lacks a sealing portion or sealing member "disposed on the shaft to maintain a vacuum seal about the shaft," this test will not maintain chamber P1 at vacuum because the casing is "adapted to leak" (col. 3, line 37, emphasis added). Although tightness may be tested, a vacuum seal will not be maintained because "a well-defined reduced clearance exists between the sleeve and the inner wall of socket 3a" (col. 3, lines 46-49). In contrast, Applicant's device is designed for "maintaining a vacuum seal" (U.S. Patent App. Pub. No. 2002/0113375 abstract, emphasis added).

Therefore, Applicant respectfully submits that the rejection is overcome because Hubler does not include a sealing portion or sealing member that is "disposed on the shaft to maintain a vacuum seal about the shaft." Applicant respectfully submits that independent claims 1, 27, and 33 are allowable. Claims 2-7, 9-26, and 36 depend from claim 1 and are allowable for at least the same reasons. Claims 28-32 and 37 depend from claim 27 and are also allowable for at least the same reasons. Claims 34 and 38 depend from claim 33 and are likewise also allowable for at least the same reasons.

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Accordingly, Applicant respectfully submits that in light of the foregoing claim amendments and remarks all of the presently pending claims are in condition for allowance. Reexamination and reconsideration are respectfully requested. Early allowance is earnestly solicited. In the event the Examiner deems personal contact desirable in disposition of this application, the Examiner is respectfully requested to call the undersigned attorney. Please charge any additional fees or credit any overpayments to deposit account No. 50-0896.

Respectfully submitted,
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